REMARKS

The present Amendment amends claims 1, 2 and 5-12 and leaves claims 3, 4 and 13-16. Therefore, the present application has pending claims 1-16.

In paragraph 1 of the Office Action, the Examiner objects to the specification as allegedly failing to provide proper antecedent basis for the claimed subject matter with respect to "NSA." Amendments were made to the specification to overcome the objection made by the Examiner. Therefore, this objection is overcome and should be withdrawn.

Claims 1, 4-13 and 15 stand rejected under 35 U.S.C. §102(e) as being anticipated by Yonekura (U.S. Patent Application Publication No. 2002/0087730 A1); and claims 2, 3, 13 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yonekura.

Claims 1 and 2 have been amended to further distinguish the present invention from the prior art and in particular, the Yonekura reference cited by the Examiner. All other claims depend directly or indirectly from claims 1 or 2. Accordingly, the invention described by the pending claims is patentably distinct from the prior art. Thus, the rejection of the claims should be withdrawn.

The present invention relates to data transmission control and a relay node for routing data packets. Routing is achieved using data identification information in an application layer of the data packet in order to efficiently transfer large amounts of data, such as multimedia data in the form of video images and sound files. In particular, the present invention uses a store and

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forward technique for data packet transmission and a relay node, along with storage addresses in a network of storage units.

The novel features of the present invention are set forth with particularity in the claims.

In accordance with the present invention, claim 1 has been amended to make it clear that the data packets are routed in accordance with a storage address of an application layer for identifying a plurality of storage units on a network. In other words, the content relay node is characterized by a routing control unit having means for selecting a destination for a packet on the basis of routing information, including the storage address of the application layer.

The Yonekura reference cited by the Examiner relates to a content relay service device having the function of reducing the data amount of network content to be transferred to a user terminal. As suggested by the Examiner at lines 8 -12 of page 3 in the Office Action, Yonekura's content relay service device performs packet routing based on an IP address of the data packet. This includes information such as a HTTP request and HTTP response. Thus, Yonekura discloses a content relay device that is applicable to a conventional IP network which uses IP layer (Layer-3: the network layer) routing technology. This disclosure does not teach or suggest the present invention.

According to conventional routing in the network layer - wherein a rout on a network in unconditionally determined in a routing table - there is a tendency for traffic to become concentrated on a specific rout and link source usage to become unbalanced. Particularly in a case where dense traffic occurs in a section on the network, there is the possibility of congestion

occurring or a link failure. These types of problems are described in the second paragraph on page 7 of the specification for the instant application.

The present invention solves the above noted problems by constructing an address system using storage addresses of an application layer that is higher than the IP layer. Thus, data packets can be transferred on a network according to application layer routing independently of IP layer routing (See, the last paragraph of page 24 of the specification for the instant application).

Yonekura has no disclosure about the application layer routing and fails to disclose the requirements of claim 1 of:

"said routing control unit has means for selecting, as a destination of a received data packet, one of said transmitting unit and said data processing unit on the basis of routing information including the storage address (of the application layer) and instructing said switch unit to make switching"

and

"said switch unit has means for switching a route according to an instruction from said routing control unit."

The above recited limitations of claim 1 make it clear that the present invention is patentably distinct over the Yonekura reference cited by the Examiner. Moreover, there is no suggestion in Yonekura to include these claims features in the Yonekura invention.

Remaining claims 2 – 16 depend directly or indirectly from claim 1 and distinguish over the Yonekura reference for the reasons set forth above.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claims 1-16.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-16 are in condition for allowance. Accordingly, early allowance of the present application based on claims 1-16 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.42914X00).

Respectfully submitted,

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